

### **AMENDMENTS TO THE DRAWINGS**

The original drawing sheet 1/2 included Fig. 1 and Fig.2. These figures have been formalized and printed on separate drawing sheets. Fig. 1 is now on replacement sheet 1/3 and Fig. 2 is now on new sheet 2/3. No other changes have been made to these figures.

The original drawing sheet 2/2 included Fig. 3, Fig. 4 and Fig.5. These figures have been formalized and amended to show proper cross-section hatching according to MPEP Section 608.02 and as required by the Examiner. Figs 3-5 are now on replacement sheet 3/3 which replaces the original sheet 2/2.

## REMARKS

Claims 1-3 are currently pending. Claims 1-3 are rejected. The drawings are objected to by the Examiner. Claim 3 has been cancelled. Claims 1 and 2 have been amended. Claims 4-19 have been added. No new matter is added.

Applicant wishes to thank the Office the thorough office action and acknowledgment of the priority claim and receipt of the certified copies. The arguments and amendments herein should place all remaining claims in condition for allowance.

### **Information Disclosure Statement**

Applicant requests that the Examiner acknowledge the review of the Information Disclosure Statement filed 7/1/2005 as shown in the Image File Wrapper (IFW) system. The Office is reminded that each reference should be reviewed, initialed and properly notated.

### **Drawings**

The Office has objected to the Drawings because they do not have cross-section hatching according to MPEP 608.02. Replacement sheets for figures 1-5 are included herein and the rejection is traversed.

### **Claims Rejections - 35 USC §112 Second Paragraph**

The Office rejected Claims 1 – 3 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. A §112 second paragraph rejection has two separate requirements, indefiniteness and failing to claim what applicant regards as the invention. With respect to indefiniteness, the "essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular disclosure, (2) the teachings of the prior art, and (3) the claim

interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." (MPEP §2173.02).

A rejection stating that the claims fail to set forth the subject matter that the applicant regards as the invention is only appropriate where the applicant has stated that the invention is something different from what is defined by the claims (MPEP §2172(a)). There is a presumption that the claims describe the applicant's invention, absent evidence to the contrary.

The Office is reminded that the focus during examination for compliance the requirement for definiteness of 112 (second paragraph) is whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. The essential inquiry pertaining to a rejection under 112 (second paragraph) is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. MPEP 2173.02. This is an objective standard because it is not dependent on the views of applicant or any particular individual, but is evaluated in the context of whether the claim is definite – i.e., whether the scope of the claim is clear to a hypothetical person possessing the ordinary level of skill in the pertinent part. MPEP 2171.

Claim 1 has been amended to more clearly identify the elements of the claims with respect to the conductors, and the rejection is traversed. Claim 2 has been amended to eliminate the parenthesis around 'quad', wherein the specification teaches the 'quad' arrangement (Page 6, Par. [28]) which is illustrated in Fig. 1 and Fig. 3. As shown in Fig. 1, there are two single phase second primary windings 14 at the transformer 4. This rejection is traversed. Claim 3 has been cancelled and the rejection is thus traversed.

#### **Claims Rejections - 35 USC §102(b)**

The Office rejected claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Hassel (US 5,444,184). Applicant herein amends claims 1-2, cancels claim 3 and adds new claims 4-19.

A rejection based on anticipation requires that a single reference teach every element of the claim (MPEP § 2131). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Or stated in another way, a **"claim is anticipated only if each and every element as set forth in the claim is found, . . . described in a single prior art reference."** *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).  
[emphasis added]

The Office alleges that Hassel teaches an integrated power and communications system with transformers and conductors as set forth by the present claims. However, Hassel describes a twisted pair solution to the transfer of signals. "According to the present invention, communication and electrical power are provided on a cable between two spaced-apart locations, wherein the communication signals are transmitted over at least two twisted pairs, the conductors of each twisted pair being connected in parallel to constitute a power conductor, and wherein the communication and power transmissions are separated by transformers." (Hassel, Col 1, lines 56-63)

For purposes of further explaining the distinctions between Hassel and the present invention, Hassel Figure 2 and Figure 4 are included herein and represent the three (3) phase system of Hassel. Referring to Hassel Figure 2 the twisted cable pairs 26, 27, 28 that carry the power and communications signals. Referring to Hassel Figure 4, each of the twisted cable pairs 60, 61, 62 have two conducting members that are either stranded or solid copper conductors. "The basic idea is to use three insulated twisted pairs as a three phase cable .... Each pair is connected in parallel for the power transmission, and each pair is used as a signal pair for signal transmission." (Hassel, Col. 2, lines 50-54)

Furthermore, Hassel specifically recites the benefits of the twisted pair configuration, wherein "[t]wo insulated conductors are twisted in a pair configuration to improve signal crosstalk and the power (harmonic) related noise immunity during normal operations and

transient conditions. Each twisted pair will act as one power phase as the conductors are connected in parallel.” Thus the present invention teaches away from the Hassel reference by using single conductor elements and not twisted pairs.

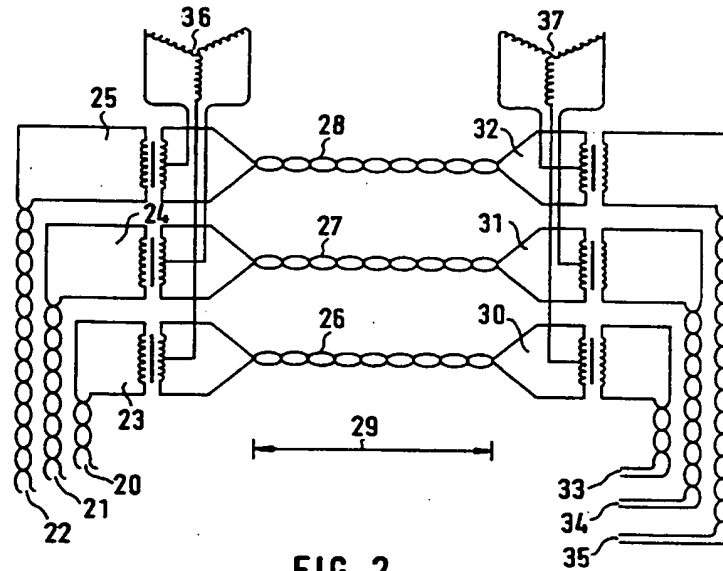


FIG. 2

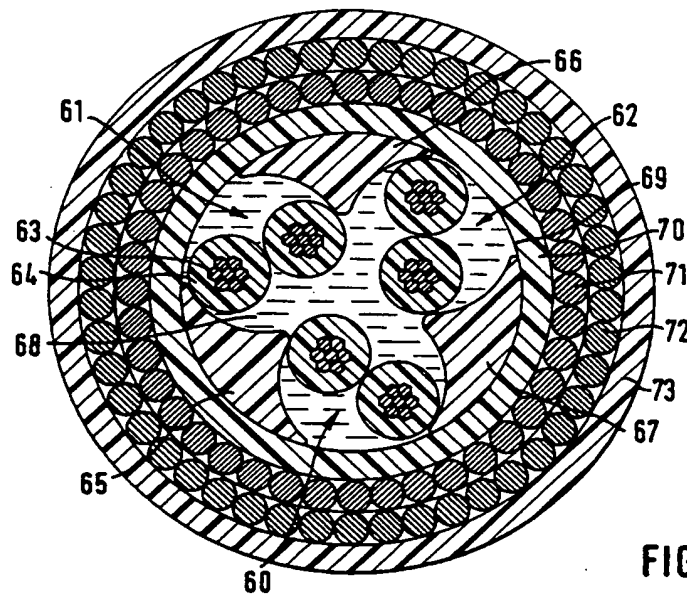


FIG. 4

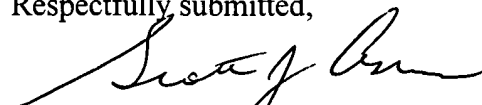
For at least these reasons that Applicant submits that the present invention is distinguishable and traverses the anticipation rejection as Hassel does not teach each and every element of the claims. Allowance of all claim is respectfully requested.

***Telephone Interview***

Present Office policy places great emphasis on telephone interviews initiated by the examiner. For this reason, it is not necessary for an attorney to request a telephone interview. Examiners are not required to note or acknowledge requests for telephone calls or state reasons why such proposed telephone interviews would not be considered effective to advance prosecution. However, it is desirable for an attorney to call the examiner if the attorney feels the call will be beneficial to advance prosecution of the application. MPEP§408

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,



Vernon C. Maine, Reg. No. 37,389  
Scott J. Asmus, Reg. No. 42,269  
Andrew P. Cernota, Reg. No. 52,711  
Attorneys/Agents for Applicant

Cus. No. 24222  
Maine & Asmus  
PO Box 3445  
Nashua, NH 03061-3445  
Tel. No. (603) 886-6100, Fax. No. (603) 886-4796  
patents@maineandasmus.com



~~1/2~~ 1/3

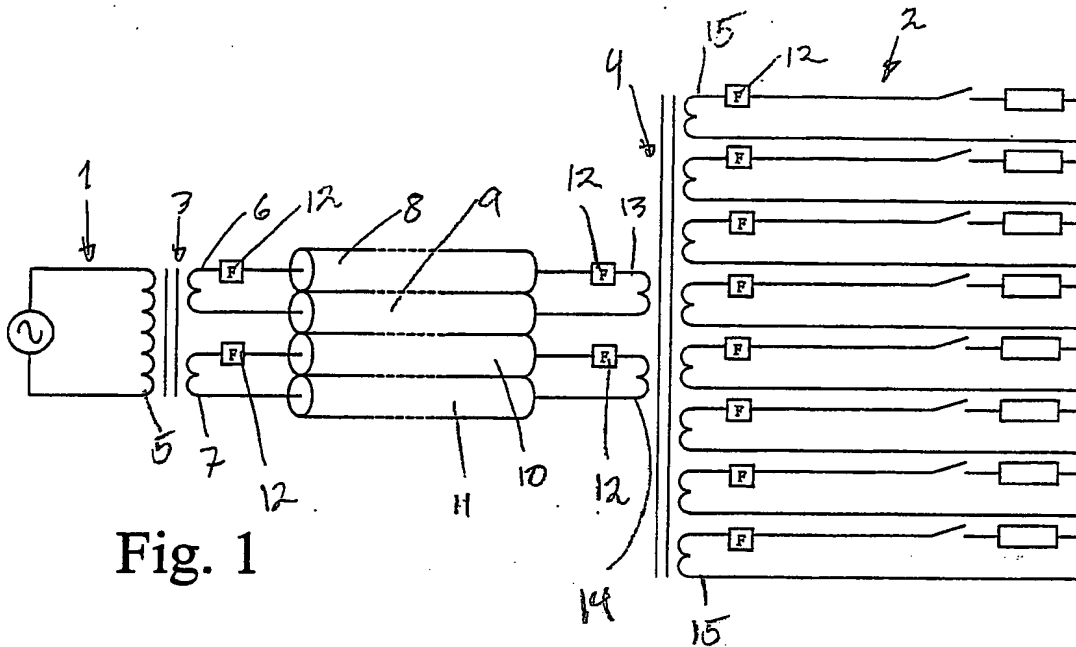


Fig. 1

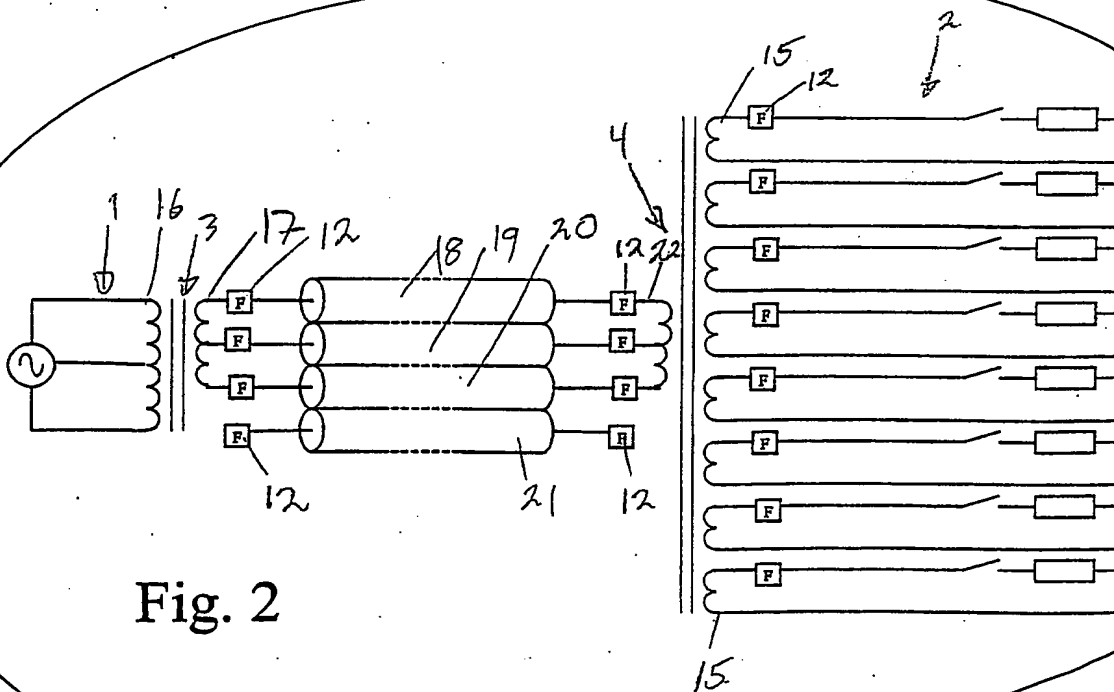


Fig. 2

Fig. 2 has been moved to a  
Separate sheet - 2/3

ANNOTATED SHEET SHOWING CHANGES

~~2/2~~ 3/3

\* Figs. 3, 4 and 5 have  
been amended to show  
proper cross-section  
hatching according to  
MPEP Section 608.02  
and as required by the  
Examiner

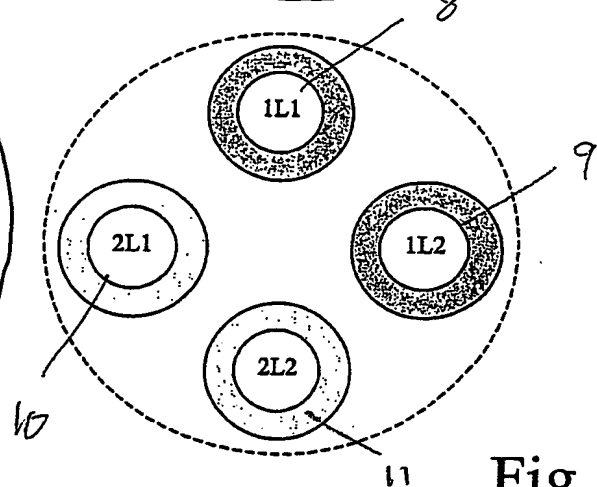


Fig. 3

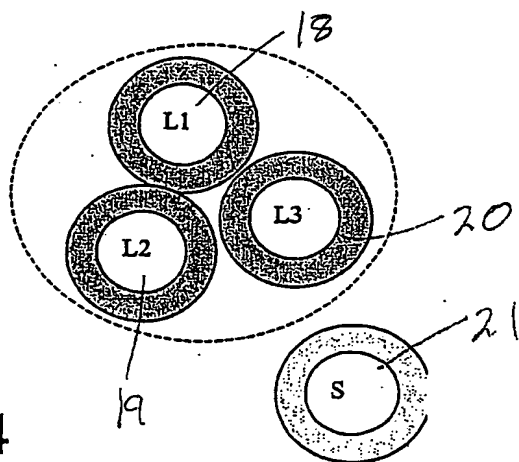


Fig. 4

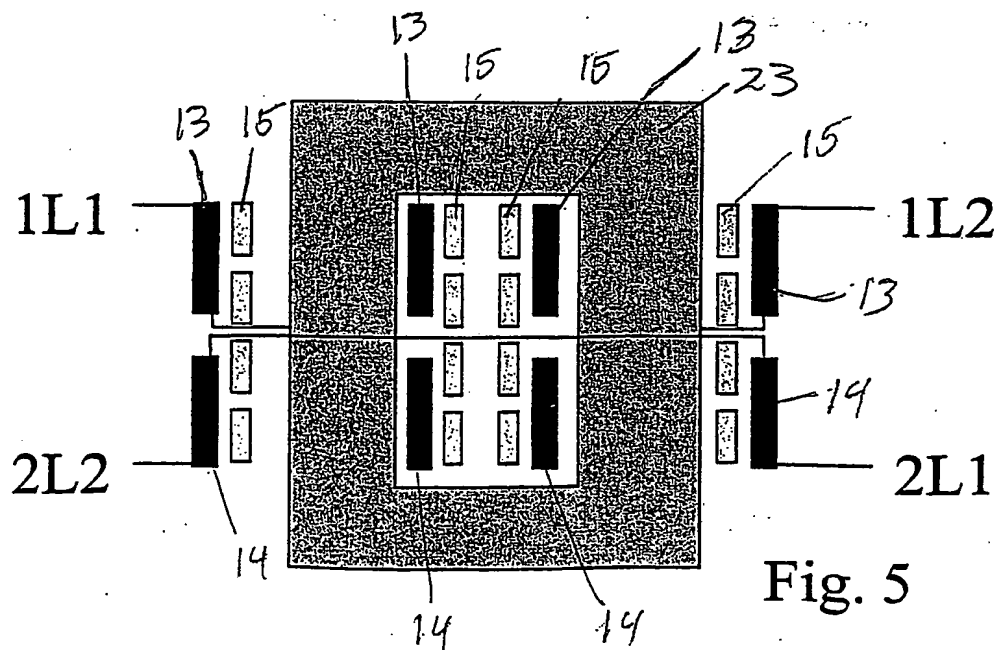


Fig. 5